

307 FIRE HYDRANTS

307.01 DESCRIPTION

Work consists of furnishing and setting fire hydrants, (boot, standpipe and hydrant complete) adjusting hydrants to grade, relocating hydrants, converting fire hydrants to traffic type, plus constructing dry wells and thrust blocks complete, at locations indicated in the contract documents or as directed. Work includes restoration of landscape features and sodding per 610.05. Trench excavation and backfill, hydrant connecting pipe, restraint, water valve and water valve casing are not part of work.

(A) SET FIRE HYDRANT. Work consists of furnishing and installing new traffic type fire hydrants, necessary tees, elbows, other fittings, and other incidental materials to complete work.

(B) RELOCATE FIRE HYDRANT. Work consists of relocating fire hydrants at new location. Work includes furnishing of all items in (A) except for the fire hydrant. Work includes removal of the hydrant from its original location and reinstallation of existing hydrant, if traffic type, or installation of a new hydrant, furnished under (D), at new location. Work shall include installation of necessary fittings.

(C) ADJUST FIRE HYDRANT. Work consists of adjusting fire hydrants to new grade at the existing location. Work includes removal of the existing hydrant and removal or addition of vertical pipe, and reinstallation of the existing hydrant, if traffic type, or installation of a new hydrant, furnished under (D), to new grade. Hydrant lowering may also require lowering of the dry well. However, when field conditions require lowering the connecting water line, work shall be considered as "Relocate Fire Hydrant".

(D) FURNISH FIRE HYDRANT. Existing fire hydrants to be relocated or adjusted, which are not traffic type or otherwise not suitable, shall not be reused. Work under this item consists of furnishing a new traffic type fire hydrant and reducer for use in completing the work specified in (B) or (C). Work includes delivering the existing hydrant to the Bureau of Water Services property yard at either 2nd Street and Bryant Street, N.W., or 18th Street and Minnesota Avenue, S.E., as directed, with a credit requisition furnished by the Engineer and approved by an authorized representative of the WASUA Utility Inspection Branch.

(E) CONVERT FIRE HYDRANT. Work consists of replacing existing non-breakaway type fire hydrants with new traffic type fire hydrants at the original location and elevation. Work includes removal and hauling the existing hydrant, as specified in (D), and furnishing and installing complete the new hydrant.

307.02 SUBMITTALS

Shop drawings per 105.02 shall be submitted for hydrants and joint details.

Affidavits, certifications, catalog and maintenance data shall be submitted per this section.

307.03 MATERIALS

Fire Hydrant - 810.02

Tar Paper - As approved

Drain Tube - Approved uncollapsible plastic with nipple, 3/4-inch by 36 inches

Gravel for Dry Well - Grading No. 57 aggregate per 803.02

Dry Well Pipe Drain Plug - As approved
Ductile Iron Pipe - 809.01
Joints and Fittings - 809.01 for Ductile Iron Pipe

307.04 CONSTRUCTION REQUIREMENTS

Excavation and backfill shall be included as part of trench excavation per 207.

Installation shall be per AWWA C 600, Sec. 3.7. When relocating fire hydrants, work may involve capping or bulkheading existing water pipe after hydrant removal at no additional cost to the District.

All related work on hydrant water line including tests and chlorination shall be per applicable provisions of 305. Hydrants shall be set plumb with 4-inch nozzle normal to the curb line.

Joint and joint restraint between boot and the connection pipe to the main shall be per 305.05(D) and (I).

Dry wells shall be excavated to dimensions as shown in the contract documents. Dry well pipe shall be installed and gravel carefully placed in a dense mass in well around the empty pipe. Hydrant drain tube shall be inserted in drain plug hole. Tar paper shall be placed over and shall overlap the dry well to keep out earth.

Any items disturbed during construction, including shrubs and lawns, shall be restored by the Contractor upon completion of work. Grassed areas shall be resodded as part of work per 610.05.

307.05 MEASURE AND PAYMENT

The unit of measure will be each.

Payment for Set, Relocate, Adjust, Furnish and/or Convert Fire Hydrant will be made at the respective contract unit price per each, which payment will include property restoration and sodding, and all labor, materials, tools, equipment and incidentals needed to complete work specified.

The installation of a gate valve and a water valve casing will be paid under other pay items.